

CITY OF SACRAMENTO

Permit No: 9809879

1231 I Street, Sacramento, CA 95814

Insp Area: 3

Site Address: 7256 BAYVIEW WY SAC

Sub-Type: RES

Parcel No: 0310410012

Housing (Y/N): N

CONTRACTOR

ZIMMERMAN ROOFING
3560 RAMONA AV
SACRAMENTO, CA

95826

OWNER

YOUNG SHERRY S
7256 BAYVIEW WY
SACRAMENTO CA

95831

ARCHITECT

Nature of Work: TEAR OFF AND REROOF W/ PIONEER TILE

CONSTRUCTION LENDING AGENCY : I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C).

Lender's Name _____ Lender's Address _____

LICENSED CONTRACTORS DECLARATION: I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with section 7000) of Division 3 of the Business and Professions Code and my license is in full force and effect.

License Class C39 License Number 557559 Date 10-2-98 Contractor Signature Jelly Coy

OWNER-BUILDER DECLARATION: I hereby affirm under penalty of perjury that I am exempt from the contractors License Law for the following reason (Sec. 7031.5, Business and Professions Code; any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors License Law (Chapter 9 (commencing with Section 7000) of Division 8 of the Business and Professions Code) or that he or she is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars (\$500.00);

____ I, as a owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professional Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or herself or through his/her own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he/she did not build or improve for the purpose of sale.)

____ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractors License Law).

____ I am exempt under Sec. _____ B & PC for this reason: _____

Date _____ Owner Signature _____

IN ISSUING THIS BUILDING PERMIT, the applicant represents, and the city relies on the representation of the applicant, that the applicant verified all measurements and locations shown on the application or accompanying drawings and that the improvement to be constructed does not violate any law or private agreement relating to permissible or prohibited locations for such improvements. This building permit does not authorize any illegal location of any improvement or the violation of any private agreement relating to location of improvements.

I certify that I have read this application and state that all information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction and hereby authorize representative(s) of this city to enter upon the abovementioned property for inspection purposes.

Date 10-6-98 Applicant/Agent Signature Jelly Coy

WORKER'S COMPENSATION DECLARATION: I hereby affirm under penalty of perjury one of the following declarations:

____ I have and will maintain a certificate of consent to self-insure for workers' compensation as provided for by Section 3700 of the Labor Code, for the performance of work for which the permit is issued.

I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier State Fund Policy Number 713 98002071

____ (This section need not be completed if the permit is for \$100 or less) I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

Date 10-6-98 Applicant Signature Jelly Coy

WARNING: FAILURE TO SECURE WORKER'S COMPENSATION COVERAGE IS UNLAWFUL AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS (\$100,000) IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST AND ATTORNEY'S FEE.

THIS PERMIT SHALL EXPIRE BY LIMITATION IF WORK IS NOT COMMENCED WITHIN 180 DAYS.

Young

Paul Zacher-Structural Engineers

4701 Lakeside Way
Fair Oaks, CA 95628

TEL: 916.961.3960
FAX: 916.961.3960
e-mail: pzacher@softcom.net

September 30, 1998

Zimmerman Roofing
3560 Ramona Avenue
Sacramento, CA 95826
TEL: 916.454.3667
FAX: 916.455.3784
TEL (Jeff): 916.392.1971
FAX (Jeff): 916.392.6853
FAX (Framer) : 916.383.5308

Attn.: Mr Jeff Tucker,

re: Job 98228: YOUNG

Subject: Structural Investigation Report of the Roof for the Residence located at 7256 Bayview Way, Sacramento, CA 95831.

As requested by Mr. Jeff Tucker, this is a report to determine what needs should be addressed to correct any structural deficiencies of the roof. Paul Zacher visited the site September 28, 1998. The investigation was made to determine the existing condition of the structure. All information, data and analysis contained within this report is based on the 1994 Uniform Building Code.

The following is based on visual observations with no subsurface investigation being made.

DESCRIPTION:

Type of Facility: Residence.
Year Built: Estimated 1970's vintage.
Occupancy: Residential.
No. of Stories: One.
Dimensions: Approximately 2000 square feet with a first story plate height of 8 feet.

CONSTRUCTION:

Roof:

The roof covering will consist of Pioneer Light Weight Shake Tile over 1/2" solid sheathing. The living and garage areas are framed with pre-engineered trusses spaced at 24" on center.

1/2

Young

CONCLUSIONS:

Roof:

The living area lacks sufficient structural capacity for the applied live and dead loads. The garage has sufficient structural capacity for the applied live and dead loads.

RECOMMENDATIONS:

If any of the following recommendations do not correspond to actual field conditions, the engineer of record shall be notified for further investigation and evaluation before continuing work.

Living Area:

1. Scab a 2x8 rafter to the existing 2x4 top chord with 16d's @ 12" on center where the span is greater than 16'-0".


It shall be noted that small hairline cracking may occur at exterior stucco and interior gypsum finished walls which are load bearing or distributing roof strut loads. These cracks are a natural occurrence as the existing structure re-distributes the new roof weight. They are cosmetic in nature and are not an indication of a structural hazard or failure.

It shall be noted that some deflection of the rafters may be evident after installation of the tile. The existing roof framing has deflected but this may not be readily evident due to the uneven nature of the existing roofing material. Concrete tile is a very consistent and uniform product and when installed in an even plane, even small deflections can become apparent. This is only a cosmetic issue and not a structural concern.

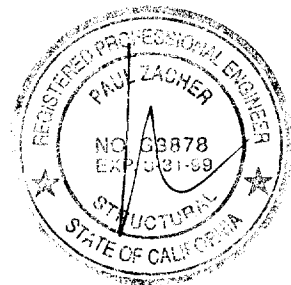
The inspection consisted of visual observation only, made solely to determine the structural capacity of the existing roof. Analysis does not determine any effects on the overall structure under lateral forces or effects on the foundation unless specifically noted in the calculations and in this document. No warranties, expressed or implied, are made or intended in conjunction with this report. The inspection was made only to the portions that were accessible. The specific items noted were those that were observable and there may be defects which are not observable, or are hidden by architectural and structural materials.

If you have any questions on the above, do not hesitate to call.

Sincerely,



Paul Zacher, P.E., S.E.
file



DESIGN LOADING:

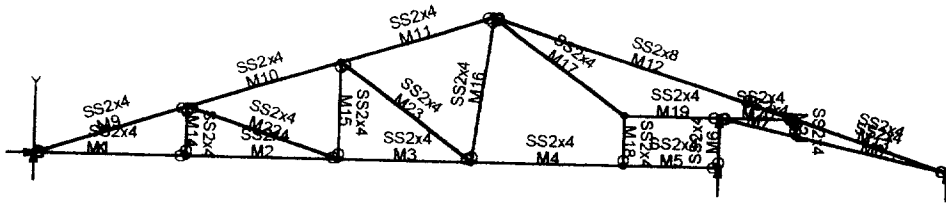
Roof Pitch	4	in 12
Pitch Adjustment Factor	1.05	

LOCATION: TOP CHORD

<u>MATERIAL</u>	<u>WEIGHT</u>	
Pioneer Everwest Light Wt	7.00	psf
Roofing felt	0.30	psf
1/2" OSB/ plywood	1.50	psf
1x4 skip sh't'g	1.09	psf
2x4 truss @ 24" oc	<u>1.28</u>	psf
Load	11.2	psf
Roof Pitch Adjustment	<u>0.60</u>	psf
Total Load	11.8	psf

LOCATION: BOTTOM CHORD

<u>MATERIAL</u>	<u>WEIGHT</u>	
Batt/blown insul	0.50	psf
2x4 truss @ 24" oc	0.64	psf
1/2" Gypboard	<u>2.50</u>	psf
Load	3.6	psf



VisualAnalysis 3.12.c Report

September 30, 1998 5:39 AM

Project:

File: C:\PAUL\PK&ASSOC\ROOFING\ZIMMER~1\YOUNG8~1\TRUSS1.VAP

Engineer: P.K. ZACHER, S.E.

Billing: 98101

Default Units: Feet, Pounds, Degrees, °Fahrenheit, Seconds.

Nodes

Node	X ft	Y ft	Fix	DX ft	Fix	DY ft	Fix	RZ
N1	0.00	0.00	Yes		Yes		No	
N2	8.00	0.00	No		No		"	
N3	16.00	0.00	"		"		"	
N4	23.00	0.00	"		"		"	
N5	31.00	0.00	"		"		"	
N6	36.00	0.00	"		Yes		"	
N7	40.00	2.67	"		"		"	
N8	40.00	1.78	"		No		"	
N9	48.00	0.00	"		Yes		"	
N10	40.00	2.67	"		No		"	
N11	8.00	2.67	"		"		"	
N12	16.00	5.33	"		"		"	
N13	24.00	8.00	"		"		"	
N14	31.00	2.67	"		"		"	

Spring Elements

This item is empty. Check the selection state, or report properties.

Member Elements

Member	Section	Material	Length ft	Weight lbs	Theta deg
M1	SS2x4	Wood	8.00	11.80	0.00
M2	"	"	8.00	11.80	0.00
M3	"	"	7.00	10.33	0.00
M4	"	"	8.00	11.80	0.00
M5	"	"	5.00	7.38	0.00
M6	"	"	2.67	3.94	0.00
M7	"	"	4.10	6.05	0.00
M8	"	"	8.20	12.09	0.00
M9	"	"	8.43	12.44	0.00
M10	"	"	8.43	12.44	0.00
M11	"	"	8.43	12.44	0.00
M12	SS1x8	"	16.86	51.54	0.00
M13	SS2x4	"	8.43	12.44	0.00
M14	"	"	2.67	3.94	0.00
M15	"	"	5.33	7.86	0.00
M16	"	"	8.06	11.89	0.00
M17	"	"	8.80	12.98	0.00
M18	"	"	2.67	3.94	0.00
M19	"	"	5.00	7.38	0.00
M20	"	"	4.00	5.90	0.00
M21	"	"	0.99	1.31	0.00
M22	"	"	8.43	12.44	0.00
M23	"	"	8.80	12.98	0.00

Section Properties

VisualAnalysis 3.12.c Report

September 30, 1998 5:42 AM

Project:

File: C:\PAPALAPK\ASSOC\ROOFING\ZIMMER~1\YOUNGS~1\TRUSS1.VAP

Engineer: F.K. ZACHER, S.E.

Billing: 98101

Default Units: Feet, Pounds, Degrees, °Fahrenheit, Seconds.

Load Cases

Load Case	Strength	Service	Results
(1) Service Case 1	Yes	Yes	1st Ord
(2) Service Case 2	"	"	"
(3) Equation Case 1	"	"	"

Service Load Cases

Load Case	Load Source	Self Weight	Loads
Service Case 1	Dead loads	None	
Service Case 2	Roof Live 1	"	

Load Combination Summary

Equation Case: Equation Case 1

Combination: +1D+1L+1Lr+1R+1W+1S+1E+1H+1F+1TS+1T+1TC+1I+1U+1LE

Contributing Cases & Source

Service Case 1 (Dead loads)

Service Case 2 (Roof Live loads)

Equation Case Combinations

Load Case	Cases	Equation
Equation Case 1	0.00	0.00

Factored Case Combinations

This item is empty. Check the selection state, or report properties.

Nodal Loads

This item is empty. Check the selection state, or report properties.

Member Point Loads

This item is empty. Check the selection state, or report properties.

Member Uniform Loads

Load Case	Member	Direction	Offset ft	End Off ft	Magnitude
Service Case 1	M1	DY proj.	0.00	8.00	-0.01 K/ft
"	M2	"	0.00	8.00	-0.01 K/ft
"	M3	"	0.00	7.00	-0.01 K/ft
"	M4	"	0.00	8.00	-0.01 K/ft

p1

"	M5	"	0.00	5.00	-0.01 K/ft
"	M7	"	0.00	4.10	-0.01 K/ft
"	M8	"	0.00	8.20	-0.01 K/ft
"	M9	"	0.00	8.43	-0.02 K/ft
"	M10	"	0.00	8.43	-0.02 K/ft
"	M11	"	0.00	8.43	-0.02 K/ft
"	M12	"	0.00	16.86	-0.02 K/ft
"	M13	"	0.00	8.43	-0.02 K/ft
Service Case 2	M9	"	0.00	8.43	-0.03 K/ft
"	M10	"	0.00	8.43	-0.03 K/ft
"	M11	"	0.00	8.43	-0.03 K/ft
"	M12	"	0.00	16.86	-0.03 K/ft
"	M13	"	0.00	8.43	-0.03 K/ft

Member Linear Loads

This item is empty. Check the selection state, or report properties.

Member Temperature Changes

This item is empty. Check the selection state, or report properties.

Member Gradient Temperatures

This item is empty. Check the selection state, or report properties.

VisualAnalysis 3.12.c Report

September 30, 1998 5:43 AM

Project:

File: C:\PAUL\PK&ASSOC\ROOFING\ZIMMER~1\YOUNG8~1\TRUSS1.VAP

Engineer: F.K. ZACHER, S.E.

Building: 98101

Default Units: Feet, Pounds, Degrees, °Fahrenheit, Seconds.

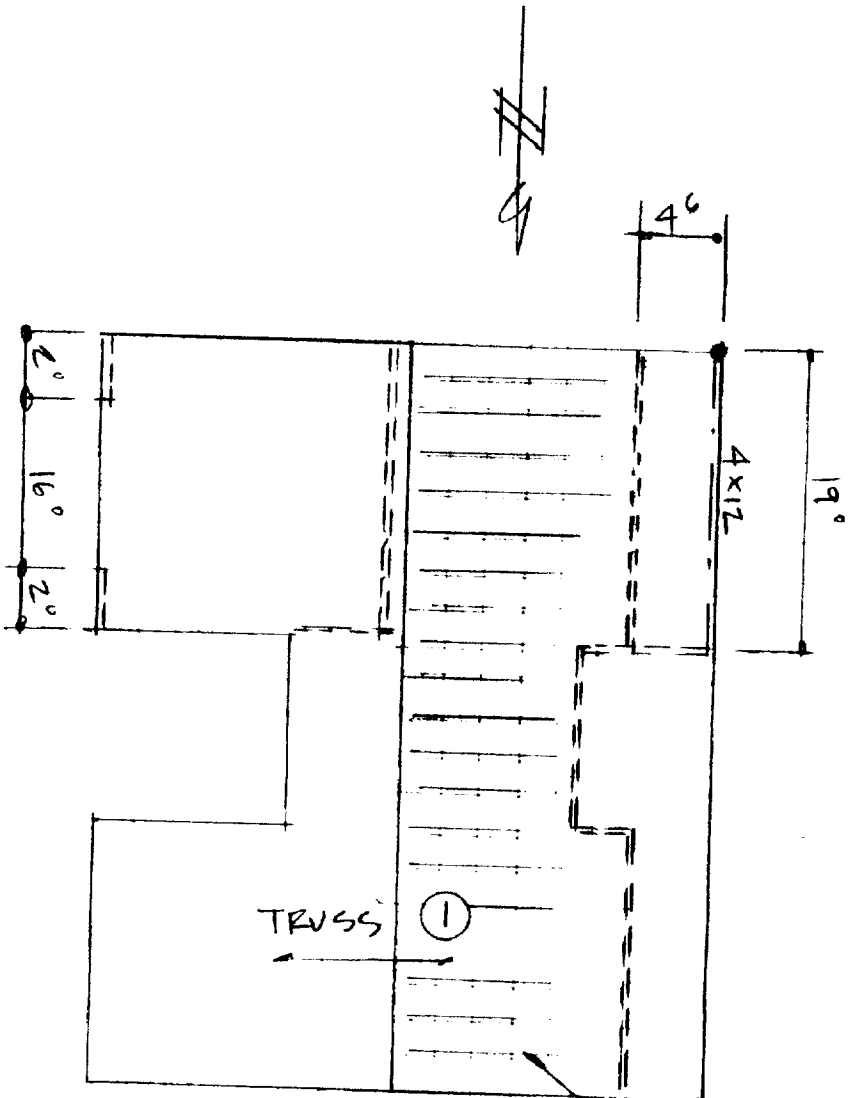
Load Cases

Load Case	Strength Service Results		
(1) Service Case 1	Yes	Yes	1st Ord
(2) Service Case 2	"	"	"
(3) Equation Case 1	"	"	"

Member Extreme Results

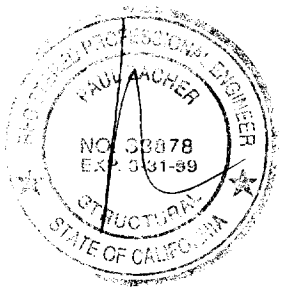
Member	Fx(lc) K	Fy(lc) K	Mz(lc) K-ft	fc max(lc) ksi	fc min(lc) ksi	Dx(lc) in	Dy(lc) in
M1	1.39(1)	-0.03(1)	0.00(2)	0.26(1)	0.04(1)	0.00(3)	-1.58(3)
"	2.84(3)	0.03(1)	0.06(1)	0.77(3)	0.54(3)	0.03(3)	0.00(1)
M2	1.39(1)	-0.04(3)	-0.10(3)	0.26(1)	-0.02(1)	0.01(1)	-2.84(3)
"	2.84(3)	0.02(1)	0.03(1)	0.94(3)	0.54(3)	0.06(3)	-0.77(1)
M3	1.07(1)	0.00(1)	-0.10(3)	0.21(1)	-0.62(3)	0.03(1)	-3.87(3)
"	2.19(3)	0.08(3)	0.26(3)	1.45(3)	0.42(3)	0.08(3)	-1.39(1)
M4	0.63(1)	-0.03(3)	0.09(1)	0.49(1)	-0.94(3)	0.04(1)	-3.88(3)
"	1.30(3)	0.03(1)	0.30(3)	1.44(3)	-0.24(1)	0.10(3)	-1.16(1)
M5	0.00(1)	-0.06(3)	0.00(3)	0.00(1)	-0.88(3)	0.05(1)	-2.38(3)
"	0.00(2)	0.00(1)	0.23(3)	0.88(3)	0.00(2)	0.10(3)	0.00(2)
M6	0.00(3)	0.00(1)	0.00(1)	0.00(3)	0.00(3)	0.00(3)	-2.50(3)
"	0.00(1)	0.00(3)	0.00(3)	0.00(1)	0.00(1)	0.00(2)	-0.05(1)
M7	1.43(1)	-0.01(1)	0.00(1)	0.27(1)	0.01(2)	1.19(1)	0.12(1)
"	2.93(3)	0.04(3)	0.10(3)	0.93(3)	0.56(3)	2.45(3)	0.54(3)
M8	1.42(1)	-0.04(3)	0.00(2)	0.27(1)	0.00(1)	1.20(1)	0.09(1)
"	2.93(3)	0.03(1)	0.12(3)	1.01(3)	0.56(3)	2.49(3)	0.55(3)
M9	-3.06(3)	-0.21(3)	0.00(2)	-0.58(3)	-2.31(3)	-0.03(3)	-1.69(3)
"	-1.43(1)	0.21(3)	0.44(3)	1.17(3)	-0.27(1)	0.00(1)	0.00(1)
M10	-2.36(3)	-0.26(3)	-0.43(3)	-0.45(3)	-2.13(3)	-0.06(3)	-2.97(3)
"	-1.09(1)	0.16(3)	0.25(3)	1.28(3)	-0.22(1)	-0.02(1)	-0.81(1)
M11	-1.54(3)	-0.16(3)	-0.43(3)	-0.27(3)	-2.00(3)	-0.08(3)	-4.20(3)
"	-0.69(1)	0.26(3)	0.25(3)	1.41(3)	-0.13(1)	-0.03(1)	-1.45(1)
M12	-1.02(3)	-0.42(3)	0.00(3)	-0.09(3)	-1.71(3)	1.20(1)	-3.41(3)
"	-0.33(2)	0.42(3)	1.78(3)	1.54(3)	-0.03(2)	2.46(3)	0.51(3)
M13	-3.08(3)	-0.21(3)	0.00(3)	-0.59(3)	-2.32(3)	1.18(1)	-0.03(2)
"	1.44(1)	0.21(3)	0.44(3)	1.17(3)	-0.27(1)	2.45(3)	0.81(3)
M14	0.00(2)	0.00(2)	0.00(1)	0.00(2)	0.00(2)	0.77(1)	0.01(1)
"	0.05(1)	0.00(3)	0.00(3)	0.01(1)	0.01(1)	1.58(3)	0.49(3)
M15	0.14(2)	0.00(3)	0.00(3)	0.03(2)	0.03(2)	1.39(1)	0.03(1)
"	0.34(3)	0.00(1)	0.00(1)	0.06(3)	0.06(3)	2.84(3)	0.88(3)
M16	0.29(2)	0.00(3)	0.00(3)	0.06(2)	0.06(2)	1.87(1)	0.27(1)
"	0.62(3)	0.00(1)	0.00(1)	0.12(3)	0.12(3)	3.83(3)	1.74(3)
M17	-0.66(3)	-0.11(3)	-0.98(3)	-0.13(3)	-3.96(3)	1.67(1)	-2.43(3)
"	-0.28(1)	-0.05(1)	0.00(1)	3.71(3)	-0.05(1)	3.43(3)	-0.05(2)
M17	-0.02(2)	0.63(1)	-3.47(3)	0.00(2)	-13.59(3)	1.16(1)	0.05(1)
"	0.03(1)	1.30(3)	0.00(3)	13.59(3)	0.01(1)	2.38(3)	2.49(3)
M18	0.39(2)	-0.50(3)	0.00(3)	0.07(2)	-9.59(3)	1.22(1)	-2.47(3)
"	0.84(3)	-0.24(1)	2.49(3)	9.91(3)	0.16(3)	2.50(3)	0.00(1)
M20	-2.02(3)	0.00(3)	0.00(3)	-0.38(3)	-0.38(3)	1.21(1)	-0.29(3)
"	-0.95(1)	0.00(1)	0.00(1)	-0.18(1)	-0.18(1)	2.50(3)	0.00(1)
M21	-0.03(2)	0.00(3)	0.00(3)	-0.01(2)	-0.01(2)	0.14(1)	1.20(1)
"	0.03(1)	0.00(2)	0.00(1)	0.01(1)	0.01(1)	0.29(3)	2.49(3)
M22	-0.68(3)	0.00(1)	0.00(1)	-0.13(3)	-0.13(3)	0.47(1)	-2.68(3)
"	-0.34(1)	0.00(3)	0.00(3)	-0.06(1)	-0.06(1)	0.97(3)	-0.66(1)

pi



SCAB 2x8x19" TO EXISTING 2x4 TOP CHOPED MEMBER THAT SPANS 16" (APPROX 20)

① ROOF PLAN - YOUNG
N.T.S.



Buckling Factor, CT is neglected due to small contribution

BENDING & COMP: TRUSS 1; MEMBER 12

Grading:

2x4, 6 or 8 Doug-fir larch: No. 2

Assumptions:

Lateral support at points of bearing
SPS or gypboard attached to compression face
Maximum center-center spacing = 24"

Width, b	1.5 inches
Depth, d	7.25 inches
Length	16.86 feet
Max Axial Comp, C	1020 lbs
Max Reaction, R	420 lbs
Max Moment, M	1780 ft-lbs
Max LL Deflection	0.51 inches
Max TL Deflection	0.51 inches
LL Defl Criteria = L/	240
TL Defl Criteria = L/	180
Duration factor, Cd	1.25
Repetitive Factor, Cr	1.15
fc =	94 psi
Fce=	963 psi
Fc*=	1094 psi
F'c=	706 psi
fb=	135 psi
F'b=	1258 psi
Shear D/C ratio	0.49 < 1.0, Member OK
Interaction equation (fc/F'c) 2 +	
fb/ (F'b(1-fc/Fce)) =	0.14 < 1.0, Member OK
Live Load defl ratio	0.60 < 1.0, Member OK
Total Load defl ratio	0.45 < 1.0, Member OK

Buckling Factor, CT is neglected due to small contribution

BENDING & COMP: TRUSS 1; MEMBER M13

Grading:

2x4, 6 or 8 Doug-fir larch: No. 2

Assumptions:

Lateral support at points of bearing
SPS or gypboard attached to compression face
Maximum center-center spacing = 24"

Width, b	1.5 inches
Depth, d	3.5 inches
Length	8.43 feet
Max Axial Comp, C	3080 lbs
Max Reaction, R	210 lbs
Max Moment, M	440 ft-lbs
Max LL Deflection	0.2 inches
Max TL Deflection	0.40 inches
LL Defl Criteria = L/	240
TL Defl Criteria = L/	180
Duration factor, Cd	1.25
Repetitive Factor, Cr	1.15
fc =	587 psi
Fce=	898 psi
Fc*=	1094 psi
F'c=	677 psi
fb=	144 psi
F'b=	1258 psi
Shear D/C ratio	0.51 < 1.0, Member OK
Interaction equation: (fc/F'c)^2 +	OK 8% over
fb/ (F'b(1-fc/Fce)) =	1.08 > 1.0, Member No Good
Live Load defl ratio	0.47 < 1.0, Member OK
Total Load defl ratio	0.71 < 1.0, Member OK